1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Dmitry Grebenev

Serial No. 10/784,498

Filing Date: February 23, 2004

Examiner: Elmira Mehrmanesh

Art Unit: 2113 Confirmation No.: 2208

Title: KERNEL-LEVEL METHOD OF FLAGGING PROBLEMS

IN APPLICATIONS

Mail Stop AF

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

PRE-APPEAL BRIEF REQUEST FOR REVIEW

The following Pre-Appeal Brief Request for Review ("Request") is being filed in accordance with the provisions set forth in the Official Gazette Notice of July 12, 2005 ("OG Notice"). Pursuant to the OG Notice, this Request is being filed concurrently with a Notice of Appeal. Applicant respectfully requests reconsideration of the application in light of the remarks set forth below.

REMARKS

Previously, Applicant received a Final Office Action dated May 13, 2009 ("Office Action") and an Advisory Action dated July 14, 2009 ("Advisory Action"). At the time of the Office Action, Claims 1-21 were pending. The Examiner rejected Claims 1, 4-19, and 21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,684,945 to Chen et al. (Chen). The Examiner also rejected Claims 2, 3, and 20 under 35 U.S.C. § 103(a) over Chen in view of U.S. Patent No. 5,485,626 to Lawlor et al. ("Lawlor").

In the interest of brevity, Applicants only seek review of Claims 2, 3, 9, and 20. Applicant does not seek review in this Request of the rejections of Claims 1, 4-8, 10-19, and 21. Applicant contends that the rejections of Claims 2, 3, 9, and 20 contains clear legal and factual deficiencies as described below. Accordingly, Applicant requests a finding that the rejection of Claims 2, 3, 9, and 20 is improper and that Claims 2, 3, 9, and 20 is allowable.

At the outset, Applicants note that each of the arguments presented below were raised in the Response to non-final Office Action filed February 4, 2009, <u>and</u> the Response to final Office Action filed June 26, 2009. **However, the Examiner has failed to properly respond to these arguments**. For example, in the most recent *Office Action*, the Examiner states: "As per claims 1-3, 12, 14, 15, and 17-20, applicant's arguments have been fully considered but they are moot in view of new claim analysis." However, the Patent Office does not provide a "new claim analysis," but instead **repeats the previous rejections** <u>word-for-word</u>.

In Applicants' Response to final Office Action filed June 26, 2009, Applicants reminded the Patent Office that, "[w]here the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it." M.P.E.P. § 707.07(f) (emphasis added). Unfortunately, the most recent Advisory Action again fails to cure this error. Concerned regarding the Patent Office's disregard of Applicants' arguments, Applicants contacted Supervisory Patent Examiner Robert W. Beausoliel. Supervisory Examiner Beausoliel dismissed Applicants' concerns, suggesting that these arguments may have been addressed in a previous action. However, this is incorrect: the Patent Office has failed to properly considered and answer the substance of Applicants arguments.

Accordingly, Applicants submit that this Application is not in "condition for appeal" because the Patent Office still has not considered Applicants' arguments. Rather than force Applicants to appeal in an effort to elicit an Examiner's Answer weighing on these arguments, Applicants request that the Panel reopen prosecution and allow the Examiner another opportunity to consider the merits of Applicants' arguments.

Claim 2

Claim 2 is directed to the method of Claim 1, "wherein the system resource usage comprises a number of the one or more processes that each of the one or more applications have spawned and the predetermined criteria comprises exceeding a predetermined limit on the number of processes that each of the one or more user applications may spawn." The Examiner concedes that *Chen* fails to disclose a "predetermined limit on the number of processes that each of the one or more user applications may spawn." Accordingly, to reject these limitations, the Examiner cites to a "work synchronization" feature of *Lawlor* at Col. 47, lines 28-42. *See Office Action*, page 13.

As explained in the previous Responses to Office Action filed February 4, 2009, and June 26, 2009, Lawlor defines "synchronization" as "the guarantee that an order or point of execution can be specified among two or more tasks." Lawlor, Col. 1, lines 46-51. To facilitate work synchronization, Lawlor discloses a "SETCLV instruction [that] sets limits to the number of processes spawned." Lawlor, Col. 47, lines 28-29. When the spawn count is "equal to the count limit set by the Set Count Limit Value (SETCLV) . . . the parent process executes the next sequential instruction (NSI)." Lawlor, Col. 47, lines 38-41. Thus, Lawlor discloses performing an action when the count is equal to the SETCLV. Claim 2, however, requires identifying the first application to a user if the system usage pattern exceeds the predetermined limit on the number of processes that each of the one or more applications may spawn. Moreover, Applicant respectfully submits that the limit on the number of processes spawned disclosed in Lawlor is not associated with one or more problems, as required by Claim 2.

Accordingly, for at least these reasons, Applicant respectfully submits that Claim 2 is allowable over the *Chen-Lawlor* combination under 35 U.S.C. § 103(a).

Claims 3 and 20

Claim 3 is directed to the method of Claim 1, wherein "determining whether a system usage pattern of the first application satisfies a predetermined criteria associated with one or more problems comprises determining whether the first application has orphaned one of the one or more running processes."

As explained in the previous Responses to Office Action filed February 4, 2009, and June 26, 2009, the Examiner points to the "work synchronization" feature of *Lawlor* to teach this limitation. The portion of *Lawlor* cited by the Examiner provides:

Then the SETCLV instruction sets limits to the number of processes spawned. The EQTDE instruction spawns the processes; e.g., this is the "fork". In the example illustrated, in addition to the main line of application code (i.e., the "parent"), there are three processes (i.e., children) spawned. The main line of code continues until it issues the Receive Count (RECC) instruction. The spawned processes execute until complete at which time they each, in turn, encounter the Send Count (SENDC) instruction. The spawned processes or threads terminate with the Dequeue Thread Dispatch Element (DQTDE) instruction. The count sent by the second of the spawned processes is equal to the count limit set by the Set Count Limit Value (SETCLV) instruction, at which point the parent process executes the next sequential instruction (NSI).

For the JOIN, the FORTRAN compiler generates an SRC (Thread Send/Receive Counter) and the inline code RECC SRC.sub.-- address. For the

4

FORK (activate parallel thread) function, the compiler generates code to increment the SRC counter limit value. This keeps track of the number of parallel tasks.

Lawlor, Col. 47, lines 28-42. Applicant respectfully contended that <u>nothing</u> in this portion of Lawlor discloses, an "orphaned process", let alone "determining whether the first application has orphaned one of the one or more running processes" as required by Claim 3. Additionally, in the Response to non-final Office Action filed February 4, 2009, and the Response to final Office Action filed June 26, 2009, Applicants also requested:

Moreover, to the extent that the Examiner intends to maintain this rejection, Applicant respectfully requests the Examiner to more specifically identify which portions of this section support the rejection so that Applicant may respond accordingly.

Unfortunately, this request has twice-gone unacknowledged.

Claim 9

Applicant respectfully submits that *Chen* fails to disclose, teach, or suggest, "a number of processes that each of the one or more applications have spawned" as recited in Claim 9. In the previous Responses to Office Action filed February 4, 2009, <u>and June 26</u>, 2009, Applicants stated:

The Examiner has not pointed to any portion of *Chen* that teaches, suggests, or discloses that the processes were spawned by an **application**. Moreover, Applicant respectfully notes that the Examiner identifies a **process** ID of *Chen* as the "identifier of a first **application**" recited in Claim 10. *See Office Action*, page 5. Applicant respectfully submits that it is improper for the Examiner to rely on the processes disclosed in *Chen* as both a **process** and an **application** to reject the pending claims.

In other words, Claim 9 recites that "the one or more applications have spawned" "a number of processes," but the Examiner cites the "processes" disclosed in *Chen* as performing both the application and process roles of Claims 9 and 10. <u>According to the Examiner's proposed application of *Chen* to Claim 9, the processes of *Chen* would have to spawn themselves.</u>

However, in the most recent Office Action, the Patent Office does not respond to this argument; instead, the Patent Office picks and chooses more unrelated passages from Chen. First, the Patent Office quotes Chen at column 22, lines 42-48, which states:

In fact, a console of instruments can he constructed to show data from local and remote hosts, including statistics on individual processes. Additionally, custom data from applications that have registered with the Data Server daemon can be added to the viewing instruments that show normal system statistics (also from local or remote hosts).

See Office Action at 15. Although this passage happens to use the words "processes" and "applications," this citation is not responsive to Applicants' concerns. As explained above, "the Examiner identifies a process ID of Chen as the 'identifier of a first application' recited in Claim 10." Thus, the fact that Chen uses the term "application" in other, unrelated passages does not explain why the Patent Office is applying the "processes" of Chen against both the "applications" and "processes" recited in Applicants' claims. Similarly, the Patent Office's citations to Chen at column 3, lines 50-58; column 16, lines 18-28; and column 93, lines 13-28 also fail to explain why the Patent Office is relying on the "processes" of Chen as both a process and an application to reject the Claims 9 and 10.

Accordingly, Applicant respectfully submits that it is improper for the Examiner to rely on the "processes" disclosed in Chen as both a process and an application to reject Claim 9. This contradiction in the Examiner's rejection is thus fatal because the "processes" of Chen would have to spawn themselves. Thus, for at least these reasons, Applicant respectfully submits that Claim 9 is allowable under 35 U.S.C. § 102 over Chen.

CONCLUSION

As the rejections of Claims 2, 3, 9, and 20 contains clear legal and factual deficiencies, Applicant respectfully requests a finding of allowance of Claims 2, 3, 9, and 20. If the PTO determines that an interview is appropriate, Applicant would appreciate the opportunity to participate in such an interview. To the extent necessary, the Commissioner is hereby authorized to charge any required fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P. Attorneys for Applicant

Ryan S. Louiles

Rvan S. Loveless

Reg. No. 51,970

Date: Aug. 1/2 2009

CORRESPONDENCE ADDRESS:

Customer Number:

05073